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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,880	06/12/2001	John Patrick Perkins	PERKINS-1532	2807

7590

10/10/2002

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EXAMINER

MAYEKAR, KISHOR

ART UNIT

PAPER NUMBER

1741

DATE MAILED: 10/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.  
**09/857,880**

Applicant(s)  
**J. PERKINS**

Examiner  
**Kishor Mayekar**

Art Unit  
**1741**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jun 12, 2001 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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## DETAILED ACTION

1. All the references cited in the international search report have been considered by the Examiner.

### *Specification*

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

3. The specification is objected because the headings introducing various paragraphs of the specification have been omitted.

The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

The following order or arrangement is preferred in framing the specification and, except for the reference to "Microfiche Appendix" and the drawings, each of the

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lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-References to Related Applications.
- © Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Microfiche Appendix" (see 37 CFR 1.96).
- (e) Background of the Invention.
  - 1. Field of the Invention.
  - 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
- (g) Brief Description of the Several Views of the Drawing(s).
- (h) Detailed Description of the Invention.
- (I) Claim or Claims (commencing on a separate sheet).
- (j) Abstract of the Disclosure (commencing on a separate sheet).
- (k) Drawings.
- (l) Sequence Listing (see 37 CFR 1.821-1.825).

4. The disclosure is objected to because of the phrase "figure" in pages 4-7 of the specification is not in the format as --Figure--. Appropriate correction is required.

*Claim Objections*

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5. Claims 1, 5, 7 and 8 are objected to because of the following informalities:

- o regarding claim 1, it is preferred to delete the phrase "so as" and to correct the phrase "characterised" to the US spelling as --characterized--; and
- o regarding claims 5, 7 and 8, it is preferred to correct the phrase "energise" to the US spelling as --energized--.

Appropriate correction is required.

*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over CARLIN (2,578,505). CARLIN's invention is directed to an apparatus for the

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supersonic agitation of fluids in a container. CARLIN discloses in Figs. 1-2 and col. 1 line 56 through col. 2, line 57 that the apparatus comprises all the structures as claimed. The difference between CARLIN and the above claims is the manner of operating the apparatus. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified <sup>CARLIN</sup>SAWYER's teachings because it has been held that the manner in which the an apparatus operates is not germane to the issue of patentability of the apparatus itself, *Ex parte Wikdahl* 10 USPQ 2d 1546, *Ex parte McCullough* 7 USPQ 2d 1889, *In re Finsterwalder* 168 USPQ 530, *In re Casey* 152 USPQ 235.

8. Claims 1-3 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over DION et al. (6,361,747). DION's invention is directed to reactor with acoustic cavitation. DION discloses in Figs. 1-2 and col. 4 lines 17-48 and col. 6, lines 18-41 that the apparatus comprises all the structures as claimed. The difference between DION and the above claims is the manner of operating the apparatus. The subject matter as a whole would have been obvious to one having ordinary skill in the art at

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the time the invention was made to have modified DION's teachings because it has been held that the manner in which the an apparatus operates is not germane to the issue of patentability of the apparatus itself, *Ex parte Wikdahl* 10 USPQ 2d 1546, *Ex parte McCullough* 7 USPQ 2d 1889, *In re Finsterwalder* 168 USPQ 530, *In re Casey* 152 USPQ 235.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over DION '747 as applied to claims 1-3 and 5-8 above, and further in view of DESBOROUGH et al. (5,658,534), a reference cited by Applicant. The difference between DION as applied above and the instant claim is the provision of double walled container and the provision of a low attenuation buffer liquid in the space between the walls of the container. DESBOROUGH shows in a device for subjecting liquid to a high ultrasonic intensity the provision of the low attenuation buffer liquid in the space between the coupler and the container (see abstract and Fig. 2). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the

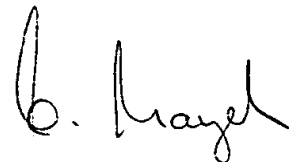
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invention was made to have modified DION's teachings as suggested by DESBOROUGH because this would suppress the erosion at the end of the coupler.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (703) 308-0477. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached on (703) 308-3322. The fax phone number for this Group is (703) 872-9310 (non-after finals) or 872-9311 (after final).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.



Kishor Mayekar  
Primary Examiner  
Group 1700

KM  
October 8, 2002